

## ABSTRACT OF THE DISCLOSURE

An apparatus and method for tuning voice playback ratio ( $pbr$ ) to optimize call quality in a packet voice communications system, while taking into account network conditions. The  $pbr$  is the ratio of resampling rate to the original sampling rate. The invention also optimizes jitter buffer length ( $jb_0$ ) for call quality. Between bursts of speech, the preferred embodiment of the invention optimizes call quality by varying the initial  $jb_0$  and the  $pbr$  to achieve the best R-factor ( $R$ ).  $R$  is an estimate of customer satisfaction with the quality of a voice call in real time. During bursts of speech, the value of  $jb_0$  is fixed at the beginning of the BOS and the  $pbr$  is varied to achieve the best  $R$ . The method can be implemented during a burst of speech and between bursts of speech whenever the network conditions change.